

CMORPH global precipitation analyses (john.janowiak@noaa.gov)

A – Very high time-space resolution global (60N-60S) precipitation analyses beginning Dec 1, 2002 that are acquired by merging passive microwave derived precipitation estimates that use IR data to move and morph the precipitation features.

B - Satellite IR & passive microwave estimates of precipitation.

C - Global (60N-60S)

D - ½ hourly, 0.072 x 0.072 degrees lat/lon (~8 km at the equator)

E - December 1, 2002 -present

F – updated in real-time

G – Most recent 10-days available at:
ftp://ftpprd.ncep.noaa.gov/pub/precip/global_CMORPH

H- Used for research purposes and for real-time monitoring.

2) *Scientific Stewardship Activities Required for Continued Production of the Climate-Quality Data Set*

A-Extensive work has been and continues to be done to:

1. Merge the various passive microwave-derived precipitation estimates and to normalize them to a standard to avoid discontinuities.
2. Develop models to reduce viewing angle dependencies particularly for the AMSU-B sensor
3. Troubleshoot snow & ice screens so that erroneous precip. Areas over snow covered surfaces are not interpreted as precipitation
4. Develop a model to reduce precipitation over semi-arid regions where precipitation can evaporate substantially before reaching the surface

B- Bias is known to be substantial over semi-arid regions in satellite precipitation estimates and a model is being constructed to address that issue. A process to validate these (and other) estimates over the US, Australia and Europe provides bias information that has and will be useful for bias correction.

C- No reprocessing is currently underway.

D- See “A” above

E- john.janowiak@noaa.gov

3) Transition of ARC Project to Operational Center

Processing and archive only at NOAA Center; PI performing Scientific Data Stewardship oversight as needed.